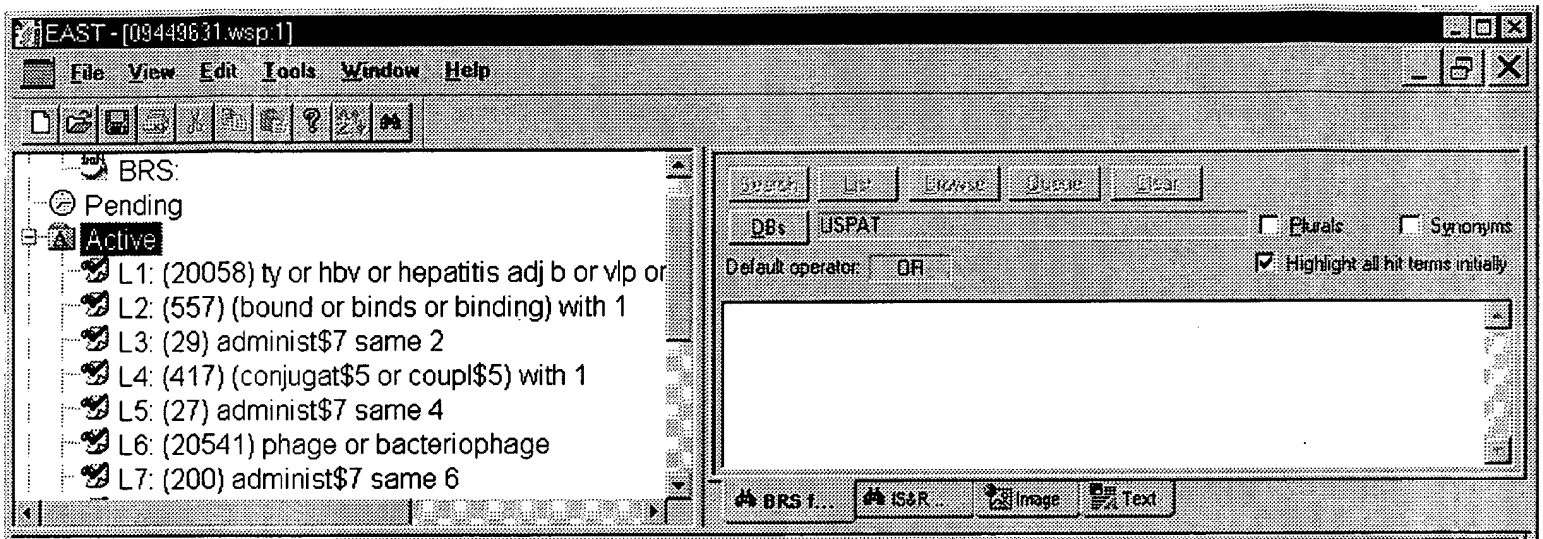

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error
1	BRS	L1	20058	ty or hbv or hepatitis adj b or vlp or vlps or virus adj like adj partic$5	USPAT; US-PGPUB; EPO; JPO;	2001/05/31 13:09		
2	BRS	L2	557	(bound or binds or binding) with 1	USPAT; US-PGPUB; EPO; JPO;	2001/05/31 13:20		
3	BRS	L3	29	administ$7 same 2	USPAT; US-PGPUB; EPO; JPO;	2001/05/31 13:13		
4	BRS	L4	417	(conjugat$5 or coupl$5) with 1	USPAT; US-PGPUB; EPO; JPO;	2001/05/31 13:22		
5	BRS	L5	27	administ$7 same 4	USPAT; US-PGPUB; EPO; JPO;	2001/05/31 13:19		
6	BRS	L6	20541	phage or bacteriophage	USPAT; US-PGPUB; EPO; JPO;	2001/05/31 13:19		
7	BRS	L7	200	administ$7 same 6	USPAT; US-PGPUB; EPO; JPO;	2001/05/31 13:20		
8	BRS	L8	46	(bound or binds or binding) with 6 and 7	USPAT; US-PGPUB; EPO; JPO;	2001/05/31 13:20		
9	BRS	L9	19	(conjugat$5 or coupl$5) with 6 and 7	USPAT; US-PGPUB; EPO; JPO;	2001/05/31 13:38		

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 * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * *
FILE 'HOME' ENTERED AT 12:07:38 ON 31 MAY 2001
=> file ca
COST IN U.S. DOLLARS                      SINCE FILE     TOTAL
                                   ENTRY   SESSION
FULL ESTIMATED COST                         0.15      0.15
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FILE LAST UPDATED: 24 May 2001  (20010524/ED)
=> s boerner t?/au
L1        123 BOERNER T?/AU
=> s virus and l1
      240321 VIRUS
L2          6 VIRUS AND L1
=> d an ti 1-6

L2  ANSWER 1 OF 6  CA  COPYRIGHT 2001 ACS
AN  121:126238  CA
TI  Fingerprinting reveals gamma-ray induced mutations in fungal DNA:
    implications for identification of patent strains of Trichoderma harzianum

L2  ANSWER 2 OF 6  CA  COPYRIGHT 2001 ACS
AN  120:155007  CA
TI  Fingerprinting fungal genomes with phage M13 DNA and oligonucleotide
    probes specific for simple repetitive DNA sequences

L2  ANSWER 3 OF 6  CA  COPYRIGHT 2001 ACS
AN  116:253942  CA
TI  Enzyme immunoassay and kit for detection of hepatitis B antibodies

L2  ANSWER 4 OF 6  CA  COPYRIGHT 2001 ACS
AN  116:168620  CA
TI  Manufacture of antigenic viral core proteins with bacteria

L2  ANSWER 5 OF 6  CA  COPYRIGHT 2001 ACS
AN  116:104497  CA
TI  Manufacture of  ***virus***  proteins with Acetobacter methanolicus

L2  ANSWER 6 OF 6  CA  COPYRIGHT 2001 ACS
AN  115:152425  CA
TI  Expression of the core antigen gene of hepatitis B  ***virus***  (HBV)
    in Acetobacter methanolicus using broad-host-range vectors

=> s hepadnavirus and l1
       279 HEPADNAVIRUS
L3       1 HEPADNAVIRUS AND L1
=> d bib abs

L3  ANSWER 1 OF 1  CA  COPYRIGHT 2001 ACS
AN  116:168620  CA
TI  Manufacture of antigenic viral core proteins with bacteria
IN  Guetter, Peter;  ***Boerner, Thomas***  ; Von Baehr, Ruediger; Lippoldt,
    Andrea
PA  Germany
SO  Ger. (East), 4 pp.
    CODEN: GEXXA8
DT  Patent
LA  German
FAN.CNT 1
    PATENT NO.      KIND  DATE        APPLICATION NO.  DATE
    --------------- ----  --------    ---------------  --------
PI  DD 296961       A5    19911219    DD 1989-328427   19890509
AB  A method for prepn. of  ***hepadnavirus***  core proteins that prevents
    the protein aggregating in the host is described.  The monomeric protein
    is useful for vaccines.  The proteins are prevented from aggregating by
    leaving the N-terminal peptide of the precursor, or an analog, on the
    protein, e.g. by preventing its removal by processing, and by modifying
    the C-terminal region.  The protein may also be manufd. as a fusion
    protein or the aggregates may be disrupted by chem. conjugation of a
    second protein.  Changes in the core protein of hepatitis B virus are
    described.

=> d all

L3  ANSWER 1 OF 1  CA  COPYRIGHT 2001 ACS
AN  116:168620  CA
TI  Manufacture of antigenic viral core proteins with bacteria
IN  Guetter, Peter;  ***Boerner, Thomas***  ; Von Baehr, Ruediger; Lippoldt,
    Andrea
PA  Germany
SO  Ger. (East), 4 pp.
    CODEN: GEXXA8
DT  Patent
LA  German
IC  ICM C12N015-00
CC  6-3 (General Biochemistry)
```

Section cross-reference(s): 10, 15
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 296961	A5	19911219	DD 1989-328427	19890509

AB A method for prepn. of ***hepadnavirus*** core proteins that prevents the protein aggregating in the host is described. The monomeric protein is useful for vaccines. The proteins are prevented from aggregating by leaving the N-terminal peptide of the precursor, or an analog, on the protein, e.g. by preventing its removal by processing, and by modifying the C-terminal region. The protein may also be manufd. as a fusion protein or the aggregates may be disrupted by chem. conjugation of a second protein. Changes in the core protein of hepatitis B virus are described.

ST ***hepadnavirus*** core protein non aggregating; hepatitis B virus core protein monomer

IT Antigens
RL: BIOL (Biological study)
(***hepadnavirus*** core protein as, manuf. of monomeric)

IT Proteins, specific or class
RL: BIOL (Biological study)
(core, of hepadnaviruses, manuf. as monomers of, changing N- and C-terminal domains for)

IT Proteins, specific or class
RL: BIOL (Biological study)
(fusion products, contg. ***hepadnavirus*** core protein, for manuf. of monomeric core protein.)

IT Virus, animal
(hepadna, core proteins of, manuf. as monomers of, changing N- and C-terminal domains for)

IT Virus, animal
(hepatitis B, core proteins of, manuf. as monomers of, changing N- and C-terminal domains for)

=> log hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.65	13.80

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.12	-1.12

SESSION WILL BE HELD FOR 60 MINUTES
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25/7/18
DIALOG(R)File 155:MEDLINE(R)

08818230 98298488 PMID: 9634749
Malarial epitopes expressed on the surface of recombinant tobacco mosaic virus.
Turpen TH; Reinl SJ; Charoenvit Y; Hoffman SL; Fallarme V; Grill LK
Biosource Technologies, Inc., Vacaville, CA 95688. biosource@mcimail.com
Bio/technology (UNITED STATES) Jan 1995, 13 (1) p53-7, ISSN 0733-222X Journal Code: AL1
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
TA164.B52, Micro ?
Using malaria as a model disease, we engineered the surface of tobacco mosaic tobamovirus (TMV) for presentation of selected epitopes to the mammalian immune system. The TMV coat protein is a well-characterized and abundant self-assembling polymer previously shown to be a highly immunogenic carrier. Selected B-cell epitopes were either inserted into the surface loop region of the TMV coat protein or fused to the C terminus using the leaky stop signal derived from the replicase protein reading frame. Tobacco plants systemically infected with each of these constructs contained high titers of genetically stable recombinant virus, enabling purification of the chimeric particles in high yield. Symptoms induced in tobacco ranged from a normal mosaic pattern similar to that induced by the parental U1 strain to a unique bright yellow mosaic. As measured by quantitative ELISA against synthetic peptide standards, wild type TMV coat protein and fusion protein synthesized by the leaky stop mechanism coassembled into virus particles at the predicted ratio of approximately 20:1. Recombinant plant viruses have the potential to meet the need for scalable and cost effective production of subunit vaccines that can be easily stored and administered.
Record Date Created: 19980717

25/7/21
DIALOG(R)File 155:MEDLINE(R)

08604647 95395998 PMID: 7666560
Modest truncation of the major capsid protein abrogates B19 parvovirus capsid formation.
Kawase M; Momoeda M; Young NS; Kajigaya S
Hematology Branch, National Heart, Lung, and Blood Institute, Bethesda, Maryland 20892, USA.
Journal of virology (UNITED STATES) Oct 1995, 69 (10) p6567-71, ISSN 0022-538X Journal Code: KCV
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
In vitro studies have suggested an important role for the minor capsid protein (VP1) unique region and the junction between VP1 and the major capsid protein (VP2) in the neutralizing immune response to B19 parvovirus. We investigated the role of the NH2-terminal region of the major structural protein in capsid structure by expressing progressively more truncated versions of the VP2 gene followed by analysis using immunoblotting and electron microscopy of density gradient-purified particles. Deletion of the first 25 amino acids (aa) of VP2 did not affect capsid assembly. Altered VP2 with truncations to aa 26 to 30, including a single amino acid deletion at position 25, failed to self-assemble but did participate with normal VP2 in the capsid structure. The altered region corresponds to the beginning of the beta A antiparallel strand. Truncations beyond aa 30 were incompatible with either self-assembly or coassembly, probably because of deletion of the beta B strand, which helps to form the core structure of the virus.
Record Date Created: 19951012

23/7/64
DIALOG(R)File 155:MEDLINE(R)

08231838 94359960 PMID: 8078912
Parvovirus particles as platforms for protein presentation.
Miyamura K; Kajigaya S; Momoeda M; Smith-Gill SJ; Young NS
Hematology Branch, National Heart, Lung, and Blood Institute, Bethesda, MD 20892.
Proceedings of the National Academy of Sciences of the United States of America (UNITED STATES) Aug 30 1994, 91 (18) p8507-11, ISSN 0027-8424
Journal Code: PV3
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Empty capsids of the human pathogenic parvovirus B19 can be produced in a baculovirus system. B19 capsids are composed mainly of major capsid protein (VP2) and a small amount of minor capsid protein (VP1); VP1 is identical to VP2 but contains an additional 227-aa N-terminal region ("unique" region). A portion of that region of VP1 is external to the capsid, and VP1 is not required for capsid formation. We substituted the unique region with a sequence encoding the 147 aa of hen egg white lysozyme (HEL) and constructed recombinant baculoviruses with variable amounts of retained VP1 sequence joined to the VP2 backbone. After cotransfection with VP2 baculovirus and expression in insect cells, capsids were purified by density sedimentation. Purified recombinant capsids contained HEL. External presentation of HEL was demonstrated by immunoprecipitation, ELISA, and immune electron microscopy using anti-lysozyme monoclonal antibodies or specific rabbit antisera. Empty particles showed enzymatic activity in a micrococcal cell wall digestion assay. Rabbits inoculated with capsids made antibodies to HEL. Intact heterologous protein can be incorporated in B19 particles and presented on the capsid surface, properties that may be useful in vaccine development, cell targeting, and gene therapy.
Record Date Created: 19941004

23/7/54
DIALOG(R)File 155:MEDLINE(R)

08696647 96130199 PMID: 8553561
Synthesis of bluetongue virus chimeric VP3 molecules and their interactions with VP7 protein to assemble into virus core-like particles.
Tanaka S; Mikhailov M; Roy P
Laboratory of Molecular Biophysics, University of Oxford, United Kingdom.
Virology (UNITED STATES) Dec 20 1995, 214 (2) p593-601, ISSN 0042-6822 Journal Code: XEA
Contract/Grant No.: A126879, PHS
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Bluetongue virus (BTV) core-like particles (CLPs) are formed in the cytoplasm of insect cells when only two major proteins (VP3 and VP7) of the BTV core are expressed by baculovirus vectors (T. J. French and P. Roy, 1990, J. Virol. 64, 1530-1536). We have recently reported that five small internal deletion mutants of VP3 form CLPs when provided with unmodified VP7 protein (D1-5; S. Tanaka and P. Roy, 1994, J. Virol. 68, 2795-2802). To investigate whether foreign sequences can be inserted into VP3 and to determine their effect on CLP formation, three of these internal regions (D1, D2, and D5), as well as the carboxy terminus, were modified to create unique restriction enzyme sites, thereby replacing VP3 coding regions with shorter synthetic sequences. Each modified VP3 gene was used to generate baculovirus expression vectors (D1I, D2I, D5I, and VP3C, respectively). Other than the D5I mutant, the mutants formed CLPs when expressed in the presence of VP7. Subsequently, T7 tag epitopes were inserted into the D1I, D2I, and VP3C restriction sites and recombinant baculoviruses were generated to express chimeric VP3 proteins (VP3D1IT, VP3D2IT, and VP3CT). Each chimeric protein retained the ability to form CLPs when VP7 protein was provided. In another construction an immunogenic sequence representing a bovine leukemia virus (BLV) glycoprotein peptide was incorporated into the carboxy terminus of VP3 and the derived CLPs were used to raise antibodies that reacted with the BLV antigen. The results suggest that the VP3 molecule can accommodate foreign sequences at certain sites without perturbing their ability to form CLPs with VP7.
Record Date Created: 19960216

23/7/60
DIALOG(R)File 155:MEDLINE(R)

08404392 94120722 PMID: 7507280
Chimeric parvovirus B19 capsids for the presentation of foreign epitopes.
Brown CS; Welling-Wester S; Feijlbrief M; Van Lent JW; Spaan WJ
Department of Virology, Faculty of Medicine, Leiden University, The Netherlands.
Virology (UNITED STATES) Feb 1994, 198 (2) p477-88, ISSN 0042-6822
Journal Code: XEA
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
Chimeric proteins consisting of the VP2 capsid protein of human parvovirus B19 and defined linear epitopes from human herpes simplex virus type 1 and mouse hepatitis virus A59 inserted at the N-terminus and at a predicted surface region were expressed by recombinant baculoviruses. The chimeric proteins expressed the inserted epitopes and assembled into empty capsids. Immunoelectron microscopy indicated that the epitopes inserted in the loop were exposed on the surface of the chimeric particles. The chimeric capsids were immunogenic in mice and antibodies specific for the inserted sequences were induced. In the case of MHV, antibodies were produced that recognized the epitope in the context of native virus. Mice immunized with the chimeric capsids were partially protected against a lethal challenge infection with either MHV or HSV.
Record Date Created: 19940224

12/7/7
DIALOG(R)File 155:MEDLINE(R)

08990614 96405036 PMID: 8809176
Surface display of proteins on bacteriophage lambda heads.
Mikawa YG; Maruyama IN; Brenner S
Department of Cell Biology, Scripps Research Institute, La Jolla CA 92037, USA.
Journal of molecular biology (ENGLAND) Sep 13 1996, 262 (1) p21-30, ISSN 0022-2836 Journal Code: J6V
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
We have developed plasmid and phage vectors for the display of foreign proteins on the surface of bacteriophage lambda capsid by modifying the D gene which encodes the major head protein gpD. The vectors have multiple cloning sites, and permit colour selection and conditional chain termination for recombinants. Displayed proteins can be fused to either the N or C terminus of gpD by a peptide linker. The conditional chain termination scheme, via a host Escherichia coli suppressor activity, allows the fusion and assembly of homomultimeric proteins as well as control of the number of fusion proteins per phage particle. We have successfully displayed beta-lactamase, IgG-binding domains of the Staphylococcus aureus protein A, and beta-galactosidase by cloning the genes into the vector. The constructs express functionally active proteins fused to gpD that assemble into phage particles. These results suggest that gpD may be fused to many other peptides and proteins at their N or C terminus and the fusion products may be accessible on the surface of bacteriophage lambda particles.
Record Date Created: 19961018

12/7/10
DIALOG(R)File 155:MEDLINE(R)

08515413 95271643 PMID: 7752219

Assembly of functional bacteriophage lambda virions incorporating C-terminal peptide or protein fusions with the major tail protein.

Dunn IS

Department of Pathology, Medical School University of Queensland Brisbane, Australia.

Journal of molecular biology (ENGLAND) May 5 1995, 248 (3) p497-506, ISSN 0022-2836 Journal Code: J6V

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

The tolerance of bacteriophage lambda morphogenesis for C-terminal additions to the tail tube major protein subunit (the V gene product; gpV) has been investigated. A second modified copy of the lambda V gene, either within a novel phage vector itself or plasmid-borne, was expressed during phage growth. High-level substitution of wild-type gpV by modified gpV bearing a basic C-terminal peptide sequence (RRASV; a target site for cAMP-dependent protein kinase) was possible using multiple repeats of a serine-glycine (SGGG) linker sequence. Highly purified phage bearing copies of gpV-RRASV could be efficiently phosphorylated by the appropriate protein kinase, and the incorporated label was shown to migrate exclusively at the expected size in protein gels. A large tetrameric protein (beta-galactosidase) could be incorporated into active virions in at least one copy, again using a Ser-Gly linker. These studies suggest that with a suitable spacing linker and controlled levels of expression, it is likely that a wide range of protein or peptide substitutents can be fused with gpV at its C terminus and assembled as component subunits of the tail tube.

Record Date Created: 19950621

23/7/55
DIALOG(R)File 155:MEDLINE(R)

08590663 95373169 PMID: 7544049
Most of the VP1 unique region of B19 parvovirus is on the capsid surface.
Kawase M; Momoeda M; Young NS; Kajigaya S
Hematology Branch, National Heart, Lung, and Blood Institute, Bethesda, Maryland 20892, USA.
Virology (UNITED STATES) Aug 20 1995, 211 (2) p359-66, ISSN 0042-6822 Journal Code: XEA
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
B19 parvovirus is pathogenic in man and a vaccine is desirable. In convalescence after acute infection, the dominant humoral immune response is directed to the minor capsid protein called VP1, which differs from the major capsid protein by an additional NH2-terminal 227 amino acids. We have previously shown that this unique region contains multiple linear neutralizing epitopes. We produced seven recombinant B19 capsids that contained progressively truncated VP1 unique region sequences, each fused to a Flag peptide (AspTyrLysAspAspAspAspLys) at the NH2-terminus. Capsids containing normal VP2 and truncated Flag-VP1 proteins and, in some cases, only truncated Flag-VP1 chimeric proteins, were analyzed by ELISA, affinity chromatography, and electron microscopy using anti-Flag monoclonal antibody. All regions examined showed binding to anti-Flag antibody in multiple assays, indicating that most of the VP1 unique region is external to the capsid and accessible to antibody binding. These results have implications for the design of a B19 parvovirus vaccine and the use of empty capsids for presentation of heterologous protein antigens.
Record Date Created: 19950920

17/7/19
DIALOG(R)File 155:MEDLINE(R)

09675095 98132672 PMID: 9465097

Chimeric papillomavirus virus-like particles elicit antitumor immunity against the E7 oncoprotein in an HPV16 tumor model.

Greenstone HL; Nieland JD; de Visser KE; De Bruijn ML; Kirnbauer R; Roden RB; Lowy DR; Kast WM; Schiller JT

Laboratory of Cellular Oncology, National Institutes of Health, 36 Convent Drive, MSC 4040, Bethesda, MD 20892-4040, USA.

Proceedings of the National Academy of Sciences of the United States of America (UNITED STATES) Feb 17 1998, 95 (4) p1800-5, ISSN 0027-8424
Journal Code: PV3

Contract/Grant No.: PO1CA74182, CA, NCI; RO1 CA74397, CA, NCI

Languages: ENGLISH

Document type: Journal Article

Record type: Completed

Papillomavirus-like particles (VLPs) are a promising prophylactic vaccine candidate to prevent human papillomavirus (HPV) infections and associated epithelial neoplasia. However, they are unlikely to have therapeutic effects because the virion capsid proteins are not detected in the proliferating cells of the infected epithelia or in cervical carcinomas. To increase the number of viral antigen targets for cell-mediated immune responses in a VLP-based vaccine, we have generated stable chimeric VLPs consisting of the L1 major capsid protein plus the entire E7 (11 kDa) or E2 (43 kDa) nonstructural papillomavirus protein fused to the L2 minor capsid protein. The chimeric VLPs are indistinguishable from the parental VLPs in their morphology and in their ability to agglutinate erythrocytes and elicit high titers of neutralizing antibodies. Protection from tumor challenge was tested in C57BL/6 mice by using the tumor cell line TC-1, which expresses HPV16 E7, but not the virion structural proteins. Injection of HPV16 L1/L2-HPV16 E7 chimeric VLPs, but not HPV16 L1/L2 VLPs, protected the mice from tumor challenge, even in the absence of adjuvant. The chimeric VLPs also induced protection against tumor challenge in major histocompatibility class II-deficient mice, but not in beta2-microglobulin or perforin knockout mice implying that protection was mediated by class I-restricted cytotoxic lymphocytes. These findings raise the possibility that VLPs may generally be efficient vehicles for generating cell-mediated immune responses and that, specifically, chimeric VLPs containing papillomavirus nonstructural proteins may increase the therapeutic potential of VLP-based prophylactic vaccines in humans.

Record Date Created: 19980319

3/7/1
DIALOG(R)File 155:MEDLINE(R)

05574482 89181627 PMID: 2467197
Hepatitis B virus surface antigen (HBsAg) as carrier for synthetic peptides having an attached hydrophobic tail.
Neurath AR; Strick N; Girard M
Lindsley F. Kimball Research Institute, New York Blood Center, NY 10021.
Molecular immunology (ENGLAND) Jan 1989, 26 (1) p53-62, ISSN 0161-5890 Journal Code: NG1
Contract/Grant No.: CA43315, CA, NCI
Languages: ENGLISH
Document type: Journal Article
Record type: Completed
B- and T-cell epitopes from three distinct regions of the hepatitis B virus (HBV) envelope (env) protein (preS1, preS2 and S) are involved in eliciting protective immunity. Since preS1 sequences inhibit the secretion of HBV env proteins from eukaryotic cells, it is difficult to prepare immunogens rich in preS1 sequences. This problem can be overcome by linking synthetic peptides from the preS1 region to particles containing both S and preS2 sequences. We describe here a novel approach for binding of synthetic peptides to exposed hydrophobic domains on HBV env proteins. Long chain fatty acids or mercaptans are covalently linked to synthetic peptides. Peptides with the attached hydrophobic tails interact strongly with HBV env proteins (S + preS2), whereby hybrid immunogens are generated. Such immunogens can be used in combination with alum, the only adjuvant approved for human use. The combination of the preS1 peptide [preS(12-47)] with particles containing the S and preS2 regions resulted in an immunogen which: (1) elicits a broad spectrum of protective antibodies; (2) circumvents the nonresponsiveness to: (a) preS1 epitopes in preS1-nonresponder strains of mice; and (b) S-protein in S-protein-nonresponder strains of mice; and (3) augments the immune response to S-protein. The combination of HBV env proteins with a synthetic peptide from the envelope of the human immunodeficiency virus (HIV-1) resulted in an immunogen eliciting anti-HIV-1. Hybrid immunogens consisting of viral proteins and of synthetic peptides represent a feasible approach for the design of future vaccines.
Record Date Created: 19890425

Do they read on my suggested claims?

infected cells. The experiments reviewed, on this approach to antiviral chemotherapy, are mainly directed at improving the chemotherapeutic index of adenine arabinoside (ara-A) in the treatment of chronic hepatitis B by its coupling to galactosyl terminating glycoproteins. (53 Refs.)

4/7/49
DIALOG(R)File 155:MEDLINE(R)

03823538 81192116
A method for coupling the hepatitis B surface antigen to aldehyde-fixed erythrocytes for use in passive hemagglutination.
Ikram H; Prince AM
Journal of virological methods (NETHERLANDS) Apr 1981, 2 (5) p269-75, ISSN 0166-0934 Journal Code: HQR
Languages: ENGLISH
Document type: JOURNAL ARTICLE

4/7/38
DIALOG(R)File 155:MEDLINE(R)

06905207 92059674
Phase I clinical trial of a recombinant malaria vaccine consisting of the circumsporozoite repeat region of Plasmodium falciparum coupled to hepatitis B surface antigen.
Vreden SG; Verhave JP; Oettinger T; Sauerwein RW; Meuwissen JH
Institute of Internal Medicine, University of Nijmegen, The Netherlands.
American journal of tropical medicine and hygiene (UNITED STATES) Nov 1991, 45 (5) p533-8, ISSN 0002-9637 Journal Code: 3ZQ
Languages: ENGLISH
Document type: CLINICAL TRIAL; JOURNAL ARTICLE
R16HBsAg is an experimental recombinant malaria vaccine consisting of 16 repeats of a four amino acid sequence (Asn-Ala-Asn-Pro or NANP) of the circumsporozoite (CS) protein of Plasmodium falciparum expressed as a fusion protein with the recombinant hepatitis B virus surface antigen (HBsAg) produced by yeast cells. Twenty male volunteers were experimentally vaccinated with the product, as well as with two doses of the commercial recombinant HBsAg vaccine Engerix B (Smith Kline Beecham Biologicals, Rixensart, Belgium) at intervals during a period of 18 months. No serious side effects were observed. Circulating antibodies to recombinant CS antigen (R32tet32) developed in all volunteers and persisted in most cases over ten months. Anti-HBs antibody production was poor initially, but a single dose of the commercial hepatitis B vaccine was sufficient to elevate these titers to high levels in all but two volunteers.

No Peptide bond,

4/7/46
DIALOG(R)File 155:MEDLINE(R)

04703068 85233430
A double blind study on immunotherapy with chemically modified honey bee venom: monomethoxy polyethylene glycol-coupled versus crude honey bee venom.
Muller U; Lanner A; Schmid P; Bischof M; Dreborg S; Hoigne R
International archives of allergy and applied immunology (SWITZERLAND) 1985, 77 (1-2) p201-3, ISSN 0020-5915 Journal Code: GP9
Languages: ENGLISH
Document type: CLINICAL TRIAL; CONTROLLED CLINICAL TRIAL; JOURNAL ARTICLE
24 patients with honey bee sting allergy were treated with either honey bee venom (HBV) or monomethoxy polyethylene glycol-coupled HBV (PEG-HBV) in a double blind trial. Both treatments induced a strong increase in HBV-specific IgG antibodies in most patients. Immunotherapy with PEG-HBV was much better tolerated than that with HBV. Conversely, patients on HBV did considerably better during a sting challenge with a living honey bee. Only 4 developed a large local and one a mild systemic reaction compared to 7 large local and 3 moderate to severe systemic reactions in the PEG-HBV-group. A higher maintenance dose of PEG-HBV may still be well tolerated but prove more effective at reexposure.

Not n'S,d

4/7/48
DIALOG(R)File 155:MEDLINE(R)

04461803 83132402
Targeting of antiviral drugs by coupling with protein carriers.
Fiume L; Busi C; Mattioli A
FEBS letters (NETHERLANDS) Mar 7 1983, 153 (1) p6-10, ISSN 0014-5793 Journal Code: EUH
Languages: ENGLISH
Document type: JOURNAL ARTICLE; REVIEW
Side effects of antiviral drugs might be circumvented by their selective delivery into infected cells. This targeting can be obtained by conjugation of the drugs to macromolecules which are taken up specifically by the

10/7/7
DIALOG(R)File 155:MEDLINE(R)

09179401 97288737
Neutralizing antiviral B cell responses.
Bachmann MF; Zinkernagel RM
Department of Pathology, University of Zurich, Switzerland.
Annual review of immunology (UNITED STATES) 1997, 15 p235-70, ISSN 0732-0582 Journal Code: ALO
Languages: ENGLISH
Document type: JOURNAL ARTICLE; REVIEW; REVIEW, ACADEMIC
Neutralizing antiviral B cell responses differ in various aspects from the many usually measured B cell responses specific for protein in adjuvants. In particular, such neutralizing antiviral B cell responses are more rapidly induced, reach higher titers, are longer lived, and are efficiently generated without adjuvants. Evidence is summarized here that the repetitiveness of many viral antigens is a key factor responsible for the efficiency of these B cell responses, amplifying B cells early and rapidly for potent IgM responses and also for efficient switching to IgG. The data reviewed indicate that B cells discriminate antigen patterns via the degree of surface Ig-cross-linking and use antigen repetitiveness as a self/nonself discriminator. (175 Refs.)

QR180.A5, Adonis

Priority 11/30/98

Flagellin conjugates/complex.

L3 ANSWER 1 OF 1 CA COPYRIGHT 2001 ACS
AN 116:168620 CA
TI Manufacture of antigenic viral core proteins with bacteria
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AB A method for prepn. of **hepadnavirus** core proteins that prevents the protein aggregating in the host is described. The monomeric protein is useful for vaccines. The proteins are prevented from aggregating by leaving the N-terminal peptide of the precursor, or an analog, on the protein, e.g. by preventing its removal by processing, and by modifying the C-terminal region. The protein may also be manufd. as a fusion protein or the aggregates may be disrupted by chem. conjugation of a second protein. Changes in the core protein of hepatitis B virus are described.

ST **hepadnavirus** core protein non aggregating; hepatitis B virus core protein monomer

IT Antigens
RL: BIOL (Biological study)
(**hepadnavirus** core protein as, manuf. of monomeric)

IT Proteins, specific or class
RL: BIOL (Biological study)
(core, of hepadnaviruses, manuf. as monomers of, changing N- and C-terminal domains for)

IT Proteins, specific or class
RL: BIOL (Biological study)
(fusion products, contg. **hepadnavirus** core protein, for manuf. of monomeric core protein.)

IT Virus, animal
(hepadna, core proteins of, manuf. as monomers of, changing N- and C-terminal domains for)

IT Virus, animal
(hepatitis B, core proteins of, manuf. as monomers of, changing N- and C-terminal domains for)